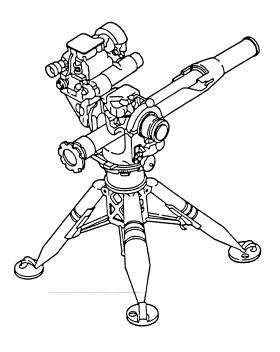
# **M220A2 TOW**



SYSTEM IDENTIFIERS										
NOMENCLATURE:	Launcher, Tubular, Guided Missile M220A2									
SSN:	C59901									
LIN:	L45740									
NSN:	1440-01-269-5849									
AMIM NO:	I106									
EIC:	PA									
FUEL TYPE:										

#### SYSTEM DESCRIPTION

The M220A2 Tube-launched, Optically tracked, Wire command linked (TOW) launcher is a crew portable, heavy anti-tank, missile system that can be operated from a ground-mounted tripod or mounted on a light vehicle. The system consists of a launch tube, battery assembly, guidance set, optical/night vision sight, tripod, traversing unit and wire-guided missile. The missile guidance set consists of two rechargeable 50 volt batteries and one rechargeable 24 volt battery. The missile functions interactively by being guided to the target, along the gunner's line of sight, by a command wire spooled behind the missile. The gunner must keep the sighting reticle on target for up to 20 seconds to effectively engage at a range of 3,750 meters. The weapon's accuracy makes it extremely effective against tanks, armored vehicles, and fortifications.

The list below identifies components associated with the weapon/materiel system. This is an all inclusive list of LINs.

# **M220A2 TOW**

LIN	NSN	NOMENCLATURE						
A70349	5855-01-173-0808	NIGHT VISION SIGHT EQUIP SET						
A70772	4935-01-070-3427	ADAPTER TEST SET GUIDED MISSILE SYSTEM						
B10760	5855-01-324-3756	BORESIGHT COLLIMATOR: BSC TEST SET						
C84041	4940-01-154-3957	CONTACT SUPPORT SET: (TOW-DRAGON)						
C84041	4935-01-082-7023	CONTACT SUPPORT SET: (TOW-DRAGON)						
D99860	6130-01-018-9786	CHARGER BATTERY: (TOW) PP-4884						
M51419	6920-00-223-4919	MISSILE SIMULATION ROUND: (TOW)						
N04982	5855-01-083-9053	TOW-NIGHT SIGHT EQUIPMENT SET: AN/UAS-12						
N04982	5855-01-152-8781	NIGHT SIGHT EQUIPMENT: (TOW 2)						
N04982	5855-01-212-4997	NIGHT SIGHT EQUIPMENT: (TOW 2)						
N04982	5855-01-245-8689	NIGHT SIGHT EQUIPMENT: (TOW 2)						
N04982	5855-01-281-9700	NIGHT SIGHT EQUIPMENT: (TOW 2)						
T14493	4935-00-150-5905	SHOP EQUIPMENT GM SYSTEM: CONTACT						
T79200	4935-01-142-9561	TEST SET GUIDED MISSILE SYSTEM: (TOW)						
T79200	4935-01-070-3426	TEST SET GUIDED MISSILE SYSTEM: (TOW)						
X04584	6920-00-179-7320	TRAINING SET GUIDED MISSILE SYSTEM						
X04584	6920-01-143-9406	TRAINING SET GUIDED MISSILE SYSTEM						
X04584	6920-01-145-6098	TRAINING SET GUIDED MISSILE SYSTEM						

### SYSTEM VARIANTS

MDS	LIN	NSN
M220A1	L45740	1440-01-104-9834
M220A1	L45740	1440-00-169-1764
M220A1	L45740	1055-01-328-8286
M220A2	L45740	1440-01-298-9788

This summary provides an overview of FY 95 Total Army operating and support costs and other information for the weapon system. Average cost per system or per mile are displayed so the data can be used in performing analytical and cost studies. Average costs are calculated using the end item's density and activity. NET REPARABLES represent the cost with the Major Subordinate Command (MSC) specific credit rates applied (detailed in Section 1 - Overview).

# M220A2 TOW FY 95 TOTAL ARMY COST SUMMARY (FY 95 Constant Dollars)

#### **DENSITY**

NUMBER OF SYSTEMS

OMA TOTAL

2,813

QUANTITY COMPLETED

AVG COST/END ITEM

0 \$0.00

\$0

PROC (MODIFICATIONS)

\$159

#### CLASS III-POL (5.05)

**NOT APPLICABLE** 

#### **DEPOT SECONDARY ITEM MAINTENANCE**

**DEPOT END ITEM MAINTENANCE (5.061)** 

DBOF TOTAL \$1,997
QUANTITY COMPLETED 4
AVG COST/SECONDARY ITEM \$499.25

#### **CLASS V-AMMUNITION (2.11)**

AMMUNITION \$3,811,500 AVG COST/SYSTEM \$1,355.00

 DS/GS
 CIVILIAN

 MIL/CIV LABOR COST
 \$444,334
 \$101,311

 AVG COST/SYSTEM
 \$157.96
 \$124.00

MAINTENANCE MANHOURS 26,168 5,116 MMHs/SYSTEM 9.30 6.26

#### **CLASS IX MATERIEL-PARTS (5.04/5.03)**

 FY 95
 AVG COST

 DOLLARS
 PER SYSTEM

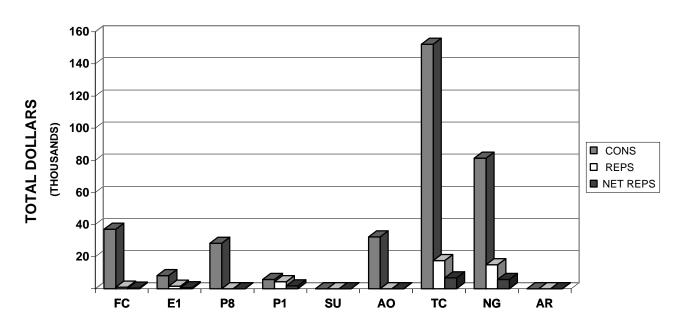
 CONSUMABLES
 \$344,888
 \$122.61

 NET REPARABLES
 \$15,419
 \$5.48

 NET TOTAL COSTS
 \$360,307
 \$128.09

The following graph and table display FY 95 Class IX costs for consumables (CONS), reparables, (REPS), and net reparables (NET REPS) by MACOM. CONS and REPS are the total costs of requisitions recorded in the Logistic Intelligence File (LIF). NET REPS are the cost to the customer in the field and are calculated by applying an MSC-specific credit rate at the NSN level. TOTAL ARMY (TA) costs are the summation of costs across all MACOMs in the table. NET TOTAL COSTS are the sums of the costs of CONS and NET REPS. NUMBER OF SYSTEMS is the density recorded in the Continuing Balance System - Expanded (CBS-X). AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the number of systems for each MACOM.

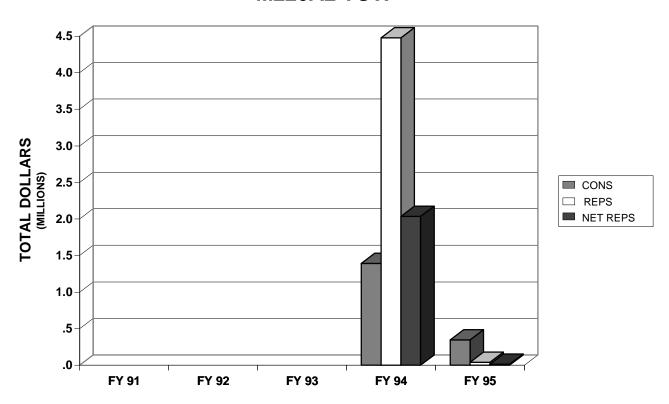
# **M220A2 TOW**



	M220A2 TOW											
FY 95 MACOM CLASS IX COSTS												
	MACOM			NET	NET TOTAL	NUMBER OF						
CODE	NAME	CONS	REPS	REPS	COSTS	SYSTEMS	SYSTEMS					
FC	FORSCOM	37,003	991	387	37,390	624	60					
E1	USAREUR	8,243	1,522	595	8,838	34	260					
P8	EUSA	28,212	0	0	28,212	50	564					
P1	USARPAC	5,701	4,421	1,729	7,430	61	122					
SU	USARSO	0	0	0	0	0	0					
AO	USASOC	32,191	0	0	32,191	15	2,146					
TC	TRADOC	152,291	17,515	6,849	159,140	193	825					
NG	ARNG	81,247	14,920	5,859	87,106	1,836	47					
AR	USAR	0	0	0	0	0	0					
TA	TOTAL ARMY	344,888	39,369	15,419	360,307	2,813	128					

The following graph and table display FY 91-95 Class IX costs for consumables (CONS), reparables (REPS) and net reparables (NET REPS) by Total Army. The Total Army costs are a summation of all the MACOMs displayed on the previous page. CONS and REPS are the total costs of requisitions recorded in the Logistic Intelligence File (LIF). NET REPS are the cost to the customer in the field and are calculated by applying an MSC-specific credit rate at the NSN level. NET TOTAL COSTS are the sums of the costs of CONS and NET REPS. NUMBER OF SYSTEMS is the density recorded in the Continuing Balance System - Expanded (CBS-X). AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the number of systems in the Total Army for the fiscal year. Blank rows indicate system was not tracked in the OSMIS database during that fiscal year.

# **M220A2 TOW**



M220A2 TOW FIVE YEAR TOTAL ARMY CLASS IX COSTS												
FISCAL			NET	NET	NUMBER OF	AVG PER						
YEAR	CONS	REPS	REPS	TOTAL COSTS	SYSTEMS	SYSTEMS						
FY 91												
FY 92												
FY 93												
FY 94	1,391,091	4,476,055	2,037,316	3,428,407	2,998	1,144						
FY 95	344,888	39,369	15,419	360,307	2,813	128						

The Total Army Class IX costs from the previous pages are broken out by Work Breakdown Structure (WBS) in the following table. The FY 95 WBS Class IX costs for consumables (CONS) and reparables (REPS) are the total cost of requisitions recorded in the Logistic Intelligence File (LIF). The NET REPS are the cost to the customer in the field and are calculated by applying an MSC-specific credit rate at the NSN level. The TOTAL costs are a summation of all the WBS elements displayed in the table. NET TOTAL COSTS are the sum of the costs in CONS and NET REPS. NUMBER OF SYSTEMS is the density recorded in the Continuing Balance System-Expanded (CBS-X). AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the total number of systems in the Army.

	M220A2 TOW FY 95 TOTAL ARMY WORK BREAKDOWN STRUCTURE COSTS												
				NET	NET	NUM OF	AVG PER						
WBS	NAME	CONS	REPS	REPS	TOTAL COSTS	SYSTEMS	SYSTEM						
01	PROPULSION	0	0	0	0	0	0						
02	PAYLOAD	0	0	0	0	0	0						
03	AIRFRAME	0	0	0	0	0	0						
04	REENTRY SYST	0	0	0	0	0	0						
05	POST BOOST SYST	0	0	0	0	0	0						
06	GUID & CONT EQPT	0	168	66	66	2,813	0						
07	ORDNANCE INIT SE	0	0	0	0	0	0						
80	AIRBORNE TEST EQ	0	0	0	0	0	0						
09	AIRBORNE TRNG EQ	0	0	0	0	0	0						
10	AUXILIARY EQPT	6	2,506	980	986	2,813	0						
11	INTEG, ASSY, TES	0	0	0	0	0	0						
12	OTHER - MISSILE	30,404	17,048	6,666	37,070	2,813	13						
20	SURV, IDENT, & T	16,354	16,037	6,297	22,651	2,813	8						
21	LAUNCH & GUID CO	77	0	0	77	2,813	0						
22	COMMUNICATIONS	13,532	0	0	13,532	2,813	5						
23	CMD & LAUNCH APP	0	0	0	0	0	0						
24	CMD & LAUNCH SYS	0	0	0	0	0	0						
25	LAUNCHER EQPT	36,723	3,610	1,410	38,133	2,813	14						
26	AUXILIARY EQPT	129	0	0	129	2,813	0						
27	INTEG, ASSY, TES	0	0	0	0	0	0						
28	OTHER - LAUNCHER	247,663	0	0	247,663								
	TOTAL	344,888	39,369	15,419	360,307	2,813	128						

The following table displays FY 91-95 Class IX costs by Work Breakdown Structure (WBS) for the Total Army. NET TOTAL COSTS are the summation for all the WBS elements displayed on the previous page and are a sum of the costs of CONS and NET REPS. NUMBER OF SYSTEMS is the density recorded in the Continuing Balance System-Expanded (CBS-X). AVG PER SYSTEM costs are calculated by dividing the costs in NET TOTAL COSTS by the total number of systems in the Army for the fiscal year. Blank columns indicate system was not tracked in the OSMIS database during that fiscal year.

	M220A2 TOW FIVE YEAR TOTAL ARMY WORK BREAKDOWN STRUCTURE COSTS											
	FIVE YEAR TO	1	1	1								
		FY 91	FY 92	FY 93	FY 94	FY 95						
		NET TOTAL										
WBS	NAME	COSTS	COSTS	COSTS	COSTS	COSTS						
01	PROPULSION				1,383	0						
02	PAYLOAD				0	0						
03	AIRFRAME				399	0						
04	REENTRY SYST				0	0						
05	POST BOOST SYST				0	0						
06	GUID & CONT EQPT				232,966	66						
07	ORDNANCE INIT SE				0	0						
08	AIRBORNE TEST EQ				0	0						
09	AIRBORNE TRNG EQ				0	0						
10	AUXILIARY EQPT				53,328	986						
11	INTEG, ASSY, TES				0	0						
12	OTHER - MISSILE				242,983	37,070						
20	SURV, IDENT, & T				510,714	22,651						
21	LAUNCH & GUID CO				407	77						
22	COMMUNICATIONS				66,509	13,532						
23	CMD & LAUNCH APP				0	0						
24	CMD & LAUNCH SYS				0	0						
25	LAUNCHER EQPT				1,773,414	38,133						
26	AUXILIARY EQPT				11,617	129						
27	INTEG, ASSY, TES				0	0						
28	OTHER - LAUNCHER				534,687	247,663						
	TOTAL				3,428,407	360,307						
	NUM OF SYSTEMS				2,998	2,813						
	AVG PER SYSTEM				1,144	128						

#### M220A2 TOW TOP 40 COST DRIVERS CLASS IX CONSUMABLES (NON-DLRs)

# M220A2 TOW CONSUMABLES (NON-DLRs)

FY 94-95

								AVERAGE COST	AVERAGE QUANTITY	TWO	EAR AVERAGE
					FY 95 AMDF	FY 95	EXTENDED COST	PER	PER	1000	LANAVLINAGE
NSN	NOMENCLATURE	WBS	MRC	ARI MATCAT	UNIT PRICE	QTY	(QTY * UNIT PRICE)	SYSTEM	100 SYSTEMS	QTY	EXTENDED COST
11011	NOMENOLATORE	WDO	WIICO	AITI WATOAT	ONTTINOL	QII	(QTT ONTTINOE)	OTOTEW	TOO GTOTEMO	<u>Q11</u>	EXTENDED COOT
1. 6135010363495	BATTERY,NONRECHA	28	Z	G22TJ	54.91	4,203.47	230,813	82.05	149.4301	6,581.17	361,372
2. 6140004548261	BATTERY ASSY BB-	12	F	L21E2	538.00	37.83	20,353	7.24	1.3448	149.48	80,420
3. 6140010565321	BATTERY,STORAGE	28	Z	G22TK	52.01	190.21	9,893	3.52	6.7618	193.61	10,070
4. 6140010495342	BATTERY.STORAGE	12	F	L21FG	733.00	11.84	8,679	3.09	0.4209	6.03	4,420
5. 5935011173304	ADAPTER, CONNECTO	25B	Z	K22MV	95.15	89.39	8,505	3.02	3.1777	160.63	15,284
6. 5855013169641	VEHICLE POWER CO	20	F	L21FG	1,729.00	4.00	6,916	2.46	0.1422	2.00	3,458
7. 5995010876456	CABLE ASSEMBLY.P	25A	Z	L22E2	216.00	31.71	6,849	2.43	1.1273	18.78	4,055
8. 1440001960038	TUBE, GUIDED MISS	25A	F	L21E2	648.00	7.02	4,549	1.62	0.2496	16.52	10,702
9. 6150011439399	CABLE ASSEMBLY.S	20	Z	L22FG	312.00	11.15	3,479	1.24	0.3964	28.13	8,777
10. 6150011442920	CABLE ASSEMBLY,S	20	Z	L22FG	241.00	13.60	3,278	1.17	0.4835	40.99	9,877
11. 6135010905364	BATTERY,PRIMARY,	28	Z	G22T7	24.06	127.22	3,061	1.09	4.5226	117.16	2,819
12. 5995010774627	CABLE ASSEMBLY,S	22	Z	Q2200	145.32	19.32	2,808	1.00	0.6868	33.84	4,918
13. 5995008890911	CABLE ASSEMBLY.S	22	Z	Q2200	103.97	27.00	2,807	1.00	0.9598	41.00	4,263
14. 1440004780334	STRAP ASSEMBLY,M	25A	Z	Q2200	63.55	44.05	2,799	1.00	1.5659	62.53	3,973
15. 5995010841274	CABLE ASSEMBLY,P	22	F	Q2100	677.55	4.00	2,710	0.96	0.1422	2.00	1,355
16. 5325011488601	STUD.TURNLOCK FA	25B	Z	T2200	23.63	107.78	2,547	0.91	3.8315	98.49	2,327
17. 7240003600094	ADAPTER KIT.GRAV	28	Z	E2200	25.37	73.90	1,875	0.67	2.6271	158.81	4,029
18. 5855012485725	BATTERY POWER CO	20	F	L21FG	3,304.00	0.50	1,652	0.59	0.0178	0.75	2,478
19. 6150004539196	CASE CABLE ASY	12	z. Z	L22E2	218.00	5.43	1,184	0.42	0.1930	2.72	592
20. 5995011439398	CABLE ASSEMBLY.B	22	Z	Q2200	40.36	28.92	1,167	0.41	1.0281	38.73	1,563
21. 1440000781641	BAG.SHROUD ASSEM	25A	Z	Q2200	77.45	15.03	1,164	0.41	0.5343	15.02	1,163
22. 5935012684497	CONNECTOR, PLUG, E	25B	Z	Q2200	214.01	5.00	1,070	0.38	0.1777	9.27	1,984
23. 5910012862803	CAPACITOR, FIXED,	25B	Z	Q2200	15.84	65.00	1,030	0.37	2.3107	32.50	515
24. 1440004561731	MOUNT.TRIPOD.GUI	25A	F	L21E2	1,009.00	1.00	1,009	0.36	0.0355	4.05	4,086
25. 5340004381708	HANDLE,LOCKING	25B	z	T2200	48.44	20.00	969	0.34	0.7110	10.00	484
26. 6150011510031	CABLE ASSEMBLY,SPEC	25A	Z	L22E2	903.00	1.00	903	0.32	0.0355	1.50	1,355
27. 5995008232872	CABLE ASSEMBLY,S	22	Z	Q22RU	37.12	23.28	864	0.31	0.8276	11.64	432
28. 5995009857618	CABLE ASSEMBLY.S	22	Z	Q2200	52.59	11.94	628	0.22	0.4245	47.15	2,480
29, 5995008232818	CABLE ASY CX-47	22	Z	Q22RU	63.37	8.29	525	0.19	0.2947	14.68	930
30. 5995008232726	CABLE ASSEMBLY P	22	Z	Q22RU Q22RU	32.33	15.12	489	0.13	0.5375	30.86	998
31. 6850011434488	KIT,LENS CLEANIN	28	Z	R2200	3.66	124.16	454	0.16	4.4138	100.94	369
32. 5306004840820	BOLT, EYE	25B	Z	T2200	24.58	18.00	442	0.16	0.6399	9.62	236
33. 4820000017749	REGULATOR,COMPRE	25B	Z	J2200	66.59	6.17	411	0.15	0.2193	5.31	354
34. 5995009857551	CABLE ASY CG-17	22	Z	Q22RU	13.65	25.82	352	0.13	0.9179	63.99	873
35. 3020002343263	GEAR,INTERNAL	22 25B	Z	J2200	346.09	1.00	346	0.13	0.0355	0.50	673 173
36. 5855012133258	BATTERY COMPARTM	20		Q2200	179.02	1.88	337	0.12	0.0353	1.69	302
37. 5855012925639	EYESHIELD.OPTICA	20	Z	Q2200 Q2200	79.13	3.87	306	0.12	0.1376	43.92	3,475
38. 5365002986564	RINGXRETAINING	20 25B	Z	T2200	79.13 5.59	50.32	281	0.11	1.7888	43.92 25.16	3,475
39. 5895011742462	CAP,LENS	23B 22	Z	Q2200	43.75	6.16	270	0.10	0.2190	5.58	244
40. 8140010724276	PAD.CUSHIONING	28	Z	E2200	43.75	60.29	260	0.10	2.1433	53.73	232
40. 6140010724276	PAD,CUSTIONING	20		E2200	4.32	60.29	260	0.09	2.1433	33.73	232

NUMBER OF SYSTEMS	2,813	338,034	98.0%	TOP 40
NOTE: ROWS MAY NOT CA	ALCULATE DUE TO ROUNDING	6,854	2.0%	OTHERS
		========		
		344.888		TOTAL

#### M220A2 TOW COST DRIVERS CLASS IX REPARABLES (DLRs)

#### M220A2 TOW REPARABLES (DLRs)

CLASS IX REPAR	ABLES (DLRS)									AVERAGE COST			FY 94-95
									EXTENDED COST	(W/CREDIT)	AVERAGE QUANTITY		EAR AVERAGE
						FY 95AMDF U	JNIT PRICE	FY 95	W/CREDIT	PER	PER	11101	EXTENDED COST
NSN	NOMENCLATURE	WBS	MRC	ARI	MATCAT	W/O CREDIT	W/CREDIT	QTY	(QTY * UNIT PRICE)	SYSTEM	100 SYSTEMS	QTY	(W/CREDIT)
								-					
1. 5855010472136	PACK,CARTRIDGE,C	20	D		L21FG	954.00	373.01	12.26	4,573	1.63	0.4358	49.16	18,337
2. 6625011200027	TEST SET,ELECTRI	12	D	R	L21E2	1,013.00	396.08	10.00	3,961	1.41	0.3555	10.50	4,159
3. 4935011843909	CASE,TEST SET	12	D		L21E2	6,918.00	2,704.94	1.00	2,705	0.96	0.0355	3.50	9,467
4. 5855011439397	VEHICLE POWER CO	20	F	Е	L21FG	1,729.00	676.04	1.54	1,041	0.37	0.0547	4.52	3,052
5. 1450011711656	CONDITIONER, POWE	10	D	D	L21E2	4,019.00	1,571.43	0.49	770	0.27	0.0174	5.54	8,698
6. 6150011124247	CABLE ASSEMBLY,S	25A	D	R	L21E2	765.00	299.12	2.00	598	0.21	0.0711	2.76	826
7. 6150011456121	CABLE ASSEMBLY,S	25A	D		L21E2	975.00	381.23	1.00	381	0.14	0.0355	1.00	381
8. 5999012982957	CIRCUIT CARD ASS	20	D		L21FG	606.00	236.95	0.91	216	0.08	0.0323	9.26	2,194
9. 6920004548295	CBL ASY PWR ELEC	10	D	R	L21E2	565.00	220.92	0.95	210	0.07	0.0338	1.98	436
10. 5855012541569	VEHICLAR POWER A	20	F	Е	L21FG	1,729.00	676.04	0.27	183	0.07	0.0096	0.64	429
11. 1440012717428	SIGHT,OPTICAL,GU	25A	D	R	L21E2	32,941.00	12,879.93	0.01	129	0.05	0.0004	18.51	238,343
12. 5855010694014	SCANNER, MECHANIC	20	D	D	G21SV	2,715.00	1,322.21	0.08	106	0.04	0.0028	1.79	2,367
13. 5999011153293	POST AMPLIFIER	20	D		L21FG	1,268.00	495.79	0.21	104	0.04	0.0075	1.93	957
14. 5999012226920	CIRCUIT CARD ASS	25A	D	R	L21E2	1,186.00	463.73	0.21	97	0.03	0.0075	20.61	9,555
15. 5998011084211	CIRCUIT CARD ASS	25A	D	R	L21E2	955.00	373.41	0.21	78	0.03	0.0075	6.52	2,433
16. 1430012211777	POWER MODULE ASS	06B	D	Е	L24E2	391.00	152.88	0.43	66	0.02	0.0153	0.22	33
17. 5999011099375	CIRCUIT CARD ASS	25A	D	D	L21E2	756.00	295.60	0.21	62	0.02	0.0075	7.02	2,074
18. 6650011182222	EYEPIECE ASSEMBL	20	D	R	L21FG	617.00	241.25	0.21	51	0.02	0.0075	4.53	1,092
19. 6150013613747	CABLE ASSEMBLY,S	25A	D		L21E2	2,922.00	1,142.50	0.02	23	0.01	0.0007	0.01	11
20. 6150011029170	CABLE ASSEMBLY	25A	D		L21E2	2,922.00	1,142.50	0.02	23	0.01	0.0007	89.27	101,991
21. 5855010377342	AUXILIARY CONTRO	20	D	_	G21SV	245.00	119.32	0.19	23	0.01	0.0068	3.75	447
22. 5999012201509	COMMAND SIGNAL GE	25A	D	D	L21E2	998.00	390.22	0.02	8	0.00	0.0007	5.40	2,105
23. 1440011153397	WIRING HARNESS,B	25A	D	R	L21E2	1,776.00	694.42	0.01	7	0.00	0.0004	23.65	16,423
24. 5999011029316	CIRCUIT CARD ASS	25A	D		L21E2	1,266.00	495.01	0.01	5	0.00	0.0004	12.24	6,059

NUMBER OF SYSTEMS 2,813  NOTE: ROWS MAY NOT CALCULATE DUE TO ROUNDING	15,419 100.0% 0 0.0%	COST DRIVERS OTHERS
	=======	
	15,419	TOTAL

The following table displays FY 95 MACOM Class V (Ammunition) costs for MAIN and SECONDARY ROUNDS EXP. MAIN and SECONDARY ROUNDS EXP are the total quantities of ordnance used by the MACOM as recorded in the Training Ammunition Management Information System (TAMIS). EXTENDED COSTS are calculated by multiplying unit price by rounds expended. TOTAL ARMY (TA) figures are the summation of numbers across all MACOMs in the table. AVG PER SYSTEM costs are calculated by dividing the costs in EXTENDED COSTS by the number of systems for each MACOM.

	M220A2 TOW FY 95 MACOM CLASS V COSTS										
	MACOM	MAIN	SECONDARY	EXTENDED	AVG						
CODE	NAME	ROUNDS EXP	ROUNDS EXP	COSTS	PER SYSTEM						
FC	FORSCOM	143	0	786,500.00	1,260						
E1	USAREUR	15	0	82,500.00	2,426						
P8	EUSA	13	0	71,500.00	1,430						
P1	USARPAC	13	0	71,500.00	1,172						
SU	USARSO	0	0	0.00	0						
AO	USASOC	6	0	33,000.00	2,200						
TC	TRADOC	46	0	253,000.00	1,311						
NG	ARNG	457	0	2,513,500.00	1,369						
AR	USAR	0	0	0.00	0						
TA	TOTAL ARMY	693	0	3,811,500.00	1,355						

The following table displays FY 95 Total Army Class V (Ammunition) costs by DODIC. ROUNDS EXPENDED are the total quantities of ordnance recorded in the Training Ammunition Management Information System (TAMIS). EXTENDED COSTS are calculated by multiplying unit price by ROUNDS EXPENDED. AVG PER SYSTEM costs are calculated by dividing the costs in EXTENDED COSTS by the number of systems for TOTAL ARMY (TA).

	M220A2 TOW FY 95 TOTAL ARMY CLASS V COSTS									
DODIC	NOMENCLATURE	UNIT PRICE	ROUNDS EXPENDED	EXTENDED COSTS	AVG PER SYSTEM					
PB96	GM PRACTICE BTM	5,500.00		3,811,500.00						
	TOTAL ARMY	1	693	3,811,500.00	1,355					

The following table displays FY 91-95 Class V (Ammunition) costs by MACOM. EXTENDED COSTS are the total costs of expenditures recorded in the Training Ammunition Management Information System (TAMIS) and are calculated by multiplying unit price by rounds expended. TOTAL ARMY (TA) costs are a summation of the FY EXTENDED COSTS. The AVG PER SYSTEM costs are calculated by dividing the TOTAL ARMY costs by the number of systems for the TOTAL ARMY. Blank columns indicate the system was not tracked in the OSMIS database during that fiscal year.

	M220A2 TOW FIVE YEAR MACOM CLASS V COSTS									
	FIVE TEAR MACONI CLASS V COSTS  FY 91 FY 92 FY 93 FY 94 FY 95									
CODE	MACOM NAME	EXTENDED COSTS	EXTENDED COSTS	EXTENDED COSTS	EXTENDED COSTS	EXTENDED COSTS				
FC	FORSCOM				672,171.50	786,500.00				
E1	USAREUR				28,242.50	82,500.00				
P8	EUSA				56,485.00	71,500.00				
P1	USARPAC				62,133.50	71,500.00				
SU	USARSO				0.00	0.00				
AO	USASOC				22,594.00	33,000.00				
TC	TRADOC				208,994.50	253,000.00				
NG	ARNG				1,960,029.50	2,370,500.00				
AR	USAR				124,267.00	143,000.00				
TA	TOTAL ARMY				3,134,917.50	3,811,500.00				
	AVG PER SYSTEM				1,046	1,355				

The following table displays FY 91-95 Class V (Ammunition) costs by DODIC. EXTENDED COSTS are the total costs of expenditures recorded in the Training Ammunition Management Information System (TAMIS) and are calculated by multiplying unit price by rounds expended. TOTAL ARMY COST is a summation of the FY EXTENDED COSTS. AVG PER SYSTEM costs are calculated by dividing the TOTAL ARMY COST by the number of systems for the TOTAL ARMY.

		M22	0A2 TOW									
	FIVE YEAR TOTAL ARMY CLASS V COSTS											
		FY 91	FY92	FY93	FY 94	FY 95						
	!	EXTENDED	EXTENDED	EXTENDED	EXTENDED	EXTENDED						
DODIC	NOMENCLATURE	COSTS	COSTS	COSTS	COSTS	COSTS						
PB96	GM PRACTICE BTM				3,134,917.50	3,811,500.00						
	TOTAL ARMY COST			<u> </u>	3,134,917.50	3,811,500.00						
	AVG PER SYSTEM				1,046	1,355						

The following table summarizes FY 95 Depot Maintenance Costs from the Master File Maintenance (MFM). Depot maintenance costs are displayed by cost elements for end item maintenance and secondary item maintenance. The OTHER cost columns represent work categories such as progressive maintenance, renovation, and fabrication/manufacture.

	M220A2 TOW FY 95 DEPOT MAINTENANCE COSTS											
COST		END		S	SECONDARY IT							
ELEMENTS		MAINTI	ENANCE			MAINTENANC	E					
	REPAIR	OVERHAUL	OTHER	MODIFICATION	REPAIR	OVERHAUL	OTHER					
CIVILIAN LABOR	0	0	0	0	0	381	0					
MILITARY LABOR	0	0	0	0	0	0	0					
MATERIEL	0	0	0	0	0	639	0					
OVERHEAD	0	0	0	0	0	973	0					
CONTRACT	0	0	0	0	0	0	0					
OTHER	0	0	0	0	0	4	0					
TOTAL	0	0	0	0	0	1,997	0					
QTY COMPLETED	0 0 0 0						0					
AVG COST	0	0	0	0	0	499	0					

The table below summarizes FY 95 Intermediate Maintenance Costs from the Work Order Logistics File (WOLF) data. The labor hours and labor costs for Direct Support/General Support Intermediate Maintenance (DS/GS) and Civilian Maintenance are displayed by MACOM and Total Army. MACOM DS/GS LABOR COSTS are calculated by multiplying MACOM DS/GS LABOR HOURS by the Army Manpower Cost System (AMCOS) E-5 composite standard rate (\$16.98). CIVILIAN LABOR COSTS are a summation from the source data.

		M220A2 FY 95 INTERMEDIATE N		COSTS	
	DS/GS LABOR	DS/GS	CIVILIAN	CIVILIAN	CIVILIAN LABOR
MACOM	HOURS	LABOR COSTS	LABOR HOURS*	LABOR COSTS <sup>*</sup>	COST/HOUR
FORSCOM	2,012	34,164	97	2,015	20.77
USAREUR	17	289			
EUSA	67	1,138			
USARPAC	269	4,568			
USARSO	0	0			
USASOC	0	0			
TRADOC	0	0	5,019	99,296	19.78
ARNG	23,803	404,175			
USAR	0	0			
TOTAL ARMY	26,186	444,334	5,116	101,311	19.80

<sup>\*</sup>TRADOC LABOR HOURS and LABOR COSTS include contractor hours and costs.

The following table summarizes FY 91-95 Depot Maintenance Costs. The depot maintenance data are recorded in MFM. FY 95 costs are a summation of the cost elements displayed on the previous page. END ITEM OVERHEAD costs were not separately identified prior to FY 92. Blank columns indicate the system was not tracked in the OSMIS database during that fiscal year.

	M220A2 TOW FIVE YEAR DEPOT MAINTENANCE COSTS											
COST			END ITEM				_	CONDARY IT				
ELEMENTS		N	MAINTENANC	E			N	MAINTENANC	<u>E</u>			
	FY 91	FY 92	FY 93	FY 94	FY 95	FY 91	FY 92	FY 93	FY 94	FY 95		
CIVILIAN LABOR				27,561	0				393,350	381		
MILITARY LABOR				0	0				0	0		
MATERIEL				12,377	0				246,864	639		
OVERHEAD				32,568	0				401,938	973		
CONTRACT				0	0				0	0		
OTHER				102	0				2,537	4		
TOTAL				72,608	0				1,044,689	1,997		
QTY COMPLETED				8	0				1,089	4		
AVG COST				9,076	0				959	499		

The table below summarizes FY 91-95 Intermediate Maintenance Costs from WOLF. The fiscal year total costs for Direct Support/General Support Intermediate Maintenance (DS/GS) and Civilian Maintenance (CIV) are displayed by MACOM and Total Army. MACOM DS/GS labor costs are calculated by multiplying MACOM labor hours by the Army Manpower Cost System (AMCOS) E-5 composite standard rate. DS/GS COST PER HR is the E-5 composite standard rate in FY 95 constant dollars. Civilian labor costs are a summation from the source data. Blank columns indicate the system was not tracked in the OSMIS database during that fiscal year.

	M220A2 TOW FIVE YEAR INTERMEDIATE MAINTENANCE COSTS											
		DIRECT/	GENERAL S	UPPORT				CIVILIAN				
	INTERMEDIATE MAINTENACE (DS/GS)				IIAM	NTENANCE (	(CIV)					
MACOM	FY 91	FY 92	FY 93	FY 94	FY 95	FY 91	FY 92	FY 93	FY 94	FY 95		
FORSCOM				62,895	34,164				885	2,015		
USAREUR				1,365	289							
EUSA				0	1,138							
USARPAC				8,512	4,568							
USARSO				273	0							
USASOC				0	0							
TRADOC				0	0				0	99,296		
ARNG				254,904	404,175							
USAR				16,512	0							
TOTAL ARMY				344,461	444,334	-	_		885	101,311		
LABOR HRS				20,193	26,168				41	5,116		
COST PER HR				17.06	16.98				21.59	19.80		

The following list shows the FY 95 Secondary Item - Rebuilds/Overhauls Cost Drivers recorded in the Master File Maintenance (MFM). AVG COST TO REBUILD/OVERHAUL is calculated by dividing the costs in FY 95 TOTAL COST TO REBUILD/OVERHAUL by the FY 95 QTY COMPLETED.

M220A2 TOW FY 95 DEPOT SECONDARY ITEM MAINTENANCE - REBUILDS/OVERHAULS COST DRIVERS										
FY 95										
		FY 95	TOTAL COST	FY 95	AVG COST					
		AMDF	TO REBUILD/	QTY	TO REBUILD/					
NSN	NOMENCLATURE	PRICE	OVERHAUL	COMPLETED	OVERHAUL					
5999-01-106-3163	CIRCUIT CARD ASS	1,991	1,997	4	499					

The following list shows the FY 95 Secondary Item Maintenance - Repairs Cost Drivers recorded in Master File Maintenance (MFM). AVG COST TO REPAIR is calculated by dividing the costs in FY 95 TOTAL COST TO REPAIR by the FY 95 QTY COMPLETED.

M220A2 TOW FY 95 DEPOT SECONDARY ITEM MAINTENANCE - REPAIRS COST DRIVERS										
		FY 95	FY 95	FY 95						
NON	NOMENOLATURE	AMDF	TOTAL COST	QTY	AVG COST					
NSN	NOMENCLATURE	PRICE	TO REPAIR	COMPLETED	TO REPAIR					
		NO DATA	<b>A</b>							

The following list shows the FY 91-95 Secondary Item - Rebuild/Overhaul Cost Drivers recorded in MFM. These five year Cost Drivers were revised from the previous years' report. AVG COST TO REBUILD/OVERHAUL is calculated by dividing the costs in FY 91-95 TOTAL COST TO REBUILD/OVERHAUL by the FY 91-95 QTY COMPLETED.

FIVE YEAR D	M220A2 TOW FIVE YEAR DEPOT SECONDARY ITEM MAINTENANCE - REBUILDS/OVERHAULS COST DRIVERS										
			FY 91-95								
		FY 95	TOTAL COST	FY 91-95	AVG COST						
		AMDF	TO REBUILD/	QTY	TO REBUILD/						
NSN	NOMENCLATURE	PRICE	OVERHAUL	COMPLETED	OVERHAUL						
1440-01-215-6014	SIGHT,OPTICAL,GUIDE	19,691	301,024	156	1,930						
1440-01-115-3405	TRAVERSING UNIT,GUI	17,080	187,063	111	1,685						
1440-01-271-7428	SIGHT,OPTICAL,GUIDE	32,941	120,981	37	3,270						
1430-01-299-2287	MISSILE GUIDANCE SE	14,100	42,173	19	2,220						
5999-01-145-7729	CIRCUIT CARD ASSEMB	2,920	33,397	52	642						
5999-01-109-9375	CIRCUIT CARD ASSEMB	756	28,656	63	455						
4935-01-063-9784	TRACKER TEST SET SUP	27,078	22,955	5	4,591						
6130-01-224-7162	POWER SUPPLY	4,310	16,583	9	1,843						
5999-01-102-9320	CIRCUIT CARD ASSEMB	564	8,174	11	743						
1440-01-241-1048	TRUNNION ASSEMBLY	2,346	8,125	10	813						

The following list shows the FY 91-95 Secondary Item - Repair Cost Drivers recorded in MFM. These five year cost drivers were revised from the previous years' report. The AVG COST TO REPAIR is calculated by dividing the costs in FY 91-95 TOTAL COST TO REPAIR by the FY 91-95 QTY COMPLETED.

		220A2 TO			_
FIVE	YEAR DEPOT SECOND			ICE - REPAIR	S
	CO	ST DRIVE	KS		
		FY 95	FY 91-95	FY 91-95	
		AMDF	TOTAL COST	QTY	AVG COST
NSN	NOMENCLATURE	PRICE	TO REPAIR	COMPLETED	TO REPAIR
5998-01-327-2071	CIRCUIT CARD ASSEMB	961	86,113	217	397
5998-01-328-8287	CIRCUIT CARD ASSEMB	514	33,561	142	236
5998-01-328-8288	CIRCUIT CARD ASSEMB	1,481	23,810	96	248
1420-01-328-8267	MISSILE GUIDANCE SE	24,813	21,749	15	1,450
1450-01-171-1656	CONDITIONER, POWER	4,019	14,808	10	1,481
5999-01-232-2339	CIRCUIT CARD ASSEMB	1,186	10,662	2	5,331
4935-01-114-3919	SHOP EQUIPMENT GM S'	97,226	8,550	1	8,550
1430-01-299-2287	MISSILE GUIDANCE SE	14,100	4,854	1	4,854
1440-01-115-3295	CLAMP ASSEMBLY	1,761	2,915	12	243
1440-01-220-1509	COMMAND SIGNAL GENE	998	2,850	6	475















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